

Date: Tuesday, 10/2/2007 10:38:26 AM  
 User: Kim Johnston

## Process Sheet

44

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 206L FWD X-TUBE  
 Job Number : 34927  
 Estimate Number : 10553  
 P.O. Number : *NA*  
 This Issue : 10/2/2007 S.O. No. : *NA*  
 Prsht Rev. : NC  
 First Issue : *NA* Type : LANDING GEAR  
 Previous Run : 34926  
 Part Number : D206667103 *BLUE*  
 Drawing Number : D206-667-143 REVB  
 Project Number : N/A  
 Drawing Revision : B  
 Material : *NA*  
 Due Date : 10/30/2007 Qty: 1 Um: Each  
 Written By : *JF*  
 Checked & Approved By : *JF 07 10.02*  
 Comment : Est Rev. 05.09.01 Add holes for compatibility with Bell  
 Skid tubes KJ/JLM

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D206-667-103 CHG002

*J.F. 07/10/08*

2.0 D6002115 Crosstube material



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D6002-115

Crosstube

*B 25662*

Check OD = 2.250"; ID = 1.750"

*J.F. 07/10/08*

3.0 MORI SEIKI MORI SEIKI CNC LATHE LARGE



Comment: MORI SEIKI CNC LATHE LARGE

1-Fill tube with sand &amp; install plugs DT8534 on both ends as per Folio FA087

2-Turn first side as per Folio FA087

3-Deburr &amp; Inspect for surface damage. Repair damage within limits as per Dwg D206-667-143.

*J.F. 07/10/08*

4.0 QC1 INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

*J.F. 07/10/08*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Tuesday, 10/2/2007 10:38:26 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206L FWD X-TUBE

Job Number: 34927

Part Number: D206667103 *BL*

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

MORI SEIKI

MORI SEIKI CNC LATHE LARGE



Comment: MORI SEIKI CNC LATHE LARGE

1-Turn second side as per Folio FA087

2-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D206-667-143.

3-Remove sand and plugs

4-Scribe part # and batch # using vibrating stylus as per Dwg D206-667-143

Inside of Cuff(Donot engrave on outside of tube)

*J.F. 07/10/08*

6.0

QC1

INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

*J.F. 07/10/08*

7.0

QC8

SECOND CHECK



Comment: SECOND CHECK

*mk 07/16/09*

8.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Polish entire outside surface of crosstube

*SR 7-10-9*

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*En 07/10/09*

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

*3/6 7-10-10*

11.0

BENDING

BENDING MACHINE



Comment: BENDING MACHINE

Bend tube as per Dwg D206-667-143 using CNC bender program 206L-fw and Folio FT017

*EL 7-10-05*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206L.FWD X-TUBE

Job Number: 34927

Part Number: D206667103

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

QC15

DIMENSIONAL CHECK OF X-TUBES



206-10-25 (1)



Comment: DIMENSIONAL CHECK OF X-TUBES

13.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Drill pilot holes in tube using drill Jig DT8541 & DT8542 as per Dwg D206-667-143. Drill all (3) top holes.

2-Drill and Ream all holes in tube to finish size using drill Jig DT8541 & DT8542 as per Dwg D206-667-143. Check dimensions between holes on all four sides.

3-Flip tube and switch drilling Jigs from right to left, left to right. Locate Jigs off existing holes using "T" pins.

4-Drill pilot holes using drill Jig DT8541 & DT8542 as per Dwg D206-667-143. Drill only the top (2) holes.

5-Drill & ream the top (2) holes to finish size using drill Jig DT8541 & DT8542 as per Dwg D206-667-143

6-Drill Fwd rivet holes using drill Jig DT8787FWD as per Dwg D206-667-143. Note: Fwd side has 3x top holes.

7-Drill Aft rivet holes using drill Jig DT8787AFT as per Dwg D206-667-143.

8-C'sink holes as per Dwg D206-667-143. Allow rivet to sit below surface to compensate for paint.

9-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D206-667-143

PTO

EL/SR  
7-10-26

AWM  
07-11-01

JD 7-10-30

14.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

AWM  
07-11-01

JD 7-10-31

15.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

ES 7-11-01

16.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

U 7-11-01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: 12 Date: 01/1/20  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07-10-25	13.1	height is slightly low.	<u>Q51042</u>	drill cuffs @ 0.700"	<u>SK</u> 7-10-26	<u>SK</u> 7/10/26	<u>Q51042</u>	07-10-25

NOTE: Date & initial all entries

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# Process Sheet

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Drawing Name: 206L FWD X-TUBE

Job Number: 34927

Part Number: D206667103

Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

OUTSIDE SERV.10

OUTSIDE SERVICES -LG



Comment: Sub-Contracting OUTSIDE SERVICES

Liquid Penetrant Inspection as per QSI 038Or

Issue P/O: 4973 LPI as per ASTM 1417

Level 2 Attach copy of NDT results to work order

*C20711105 ①*

18.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Inspect for transit damage

Ensure copy of NDT results attached to work order.

*C20711105 ①*

19.0

QC6

DIMENSIONAL CHECK



Comment: Inspect for damage & ensure results are as per Dwg D206-667-103

*6 02/10/05*

20.0

SPRAY PAINTING

SPRAY PAINTING



Comment: SPRAY PAINTING

1-Prime inside and outside crosstube as per QSI 005 4.2

2-Paint outside crosstube with *Deflect Blue + clear* as per QSI 005 4.2

*ml 07 11 13 ①*

21.0

QC14

INSPECT SPRAY PAINT



Comment: Inspect Spray Paint

Wrap in plastic bag to protect from scratches

*07-11-14 ①*

22.0

D2856400

Abrasion Strip



Comment: Qty.: 1.2138 f(s)/Unit Total : 1.2138 f(s)

Pick:

Qty Part number Description Batch

2 D2856-400(Cut to 6.94") Abrasion Strip

*34642*

*ml 07 11 14*

23.0

D2873043

Nut Plate Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D2873-043 Nut Plate

*33422*

*ml 07 11 06*

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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## Process Sheet

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Drawing Name: 206L FWD X-TUBE

Job Number: 34927

Part Number: D206667103

Job Number:



Seq. #:

Machine Or Operation:

Description :

24.0

D2873045

Nut Plate Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D2873-045

Nut Plate

33692

ml 07 11 06

25.0

D28911

Support 2.25 dia



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D2891-1

Support

34147

ml 07 11 14

26.0

MS20601AD4W8

RIVET



Comment: Qty.: 14.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick:

Qty Part number Description Batch

14 MS20601AD4W8 Rivet

105057

ml 07 11 06

27.0

MS2192020

Clamp (per MIL-DTL-8783C)



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part number Description Batch

4 MS21920-20

Clamp

102787

ml 07 11 14

28.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Install abrasion strips as per QSI 035 using DT8579. Note: (2) Aft holes should be facing up.

2-Install supports and clamps as per Dwg D4206-667-143. Torque clamps to 80-100 in lb

3-Install nut plates as per Dwg D206-667-143. Touch-up rivet heads with Imron paint.

ml 07 11 14

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206L-FWD X-TUBE

Job Number: 34927

Part Number: D206667103

BL

Job Number:



Seq. #:

Machine Or Operation:

Description :

29.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

17-11-15 @

30.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

31.0

AN532A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Bolt

Batch:

M10 4936

SP

32.0

MS21042L5

Nut



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Nut

Batch:

M105430

SP

33.0

AN57A

Bolt



Comment: Qty.: 10.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:Packing Kit

Qty Part number

10 AN5-7A

Description Batch

Bolt

M105426

SP

34.0

AN530A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Pick:Packing Kit

Qty Part number

4 AN5-30A

Description Batch

Bolt

M103641

SP

35.0

AN960JD516

Washer



Comment: Qty.: 18.0000 Each(s)/Unit Total: 18.0000 Each(s)

Pick:Packing Kit

Qty Part number

18 AN960JD516

Description Batch

Washer

M104156

7-11-20 SP (14)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: D Date: 07/11/08  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>07/11/08</u>								

NOTE: Date & initial all entries

Date: Tuesday, 10/2/2007 10:38:26 AM

User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206L FWD X-TUBE

Job Number: 34927

Part Number: D206667103 *bi*

Job Number:



Seq. #:

Machine Or Operation:

Description :

36.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

*E 04/12/20*

37.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D206-667-103.

Location: \_\_\_\_\_

PPP Rev: \_\_\_\_\_

*B*

*7/11/20*

*SD*

*(X)*

38.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

*(1)*  
*10/2/11/20*

Job Completion



*10/2/11/20*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b> 34927
<b>Description:</b> Crosstube Assembly (206L High Fwd)	<b>Part Number:</b> D206-667-143
<b>Inspection Dwg:</b> D206-667-143 Rev: B	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	2.240	+0.005/-0.000	2.244" ✓			
	1.982	+0.005/-0.000	1.985" ✓			
	2.019	+0.005/-0.000	2.023" ✓			
	2.058	+0.005/-0.000	2.061" ✓			
	2.097	+0.005/-0.000	2.100" ✓			
	2.136	+0.005/-0.000	2.138" ✓			
	2.176	+0.005/-0.000	2.179" ✓			
	2.201	+0.005/-0.000	2.204" ✓			
	0.125	+/-0.010	.120" ✓			
	0.400 x 30°	+/-0.010	.400" x 30° ✓			
	R0.063	+/-0.010	R0.063" ✓			
	R0.500	+/-0.010	R0.500" ✓			
	4.438	+/-0.030	4.436" ✓			
SIDE B	104.98	+/-0.020	104.98" ✓			
	2.240	+0.005/-0.000	2.245" ✓			
	1.982	+0.005/-0.000	1.987" ✓			
	2.019	+0.005/-0.000	2.024" ✓			
	2.058	+0.005/-0.000	2.063" ✓			
	2.097	+0.005/-0.000	2.101" ✓			
	2.136	+0.005/-0.000	2.139" ✓			
	2.176	+0.005/-0.000	2.180" ✓			
	2.201	+0.005/-0.000	2.205" ✓			
	0.125	+/-0.010	.120" ✓			
	0.400 x 30°	+/-0.010	.400" x 30° ✓			
	R0.063	+/-0.010	R0.063" ✓			
	R0.500	+/-0.010	R0.500" ✓			
	4.438	+/-0.030	4.445" ✓			

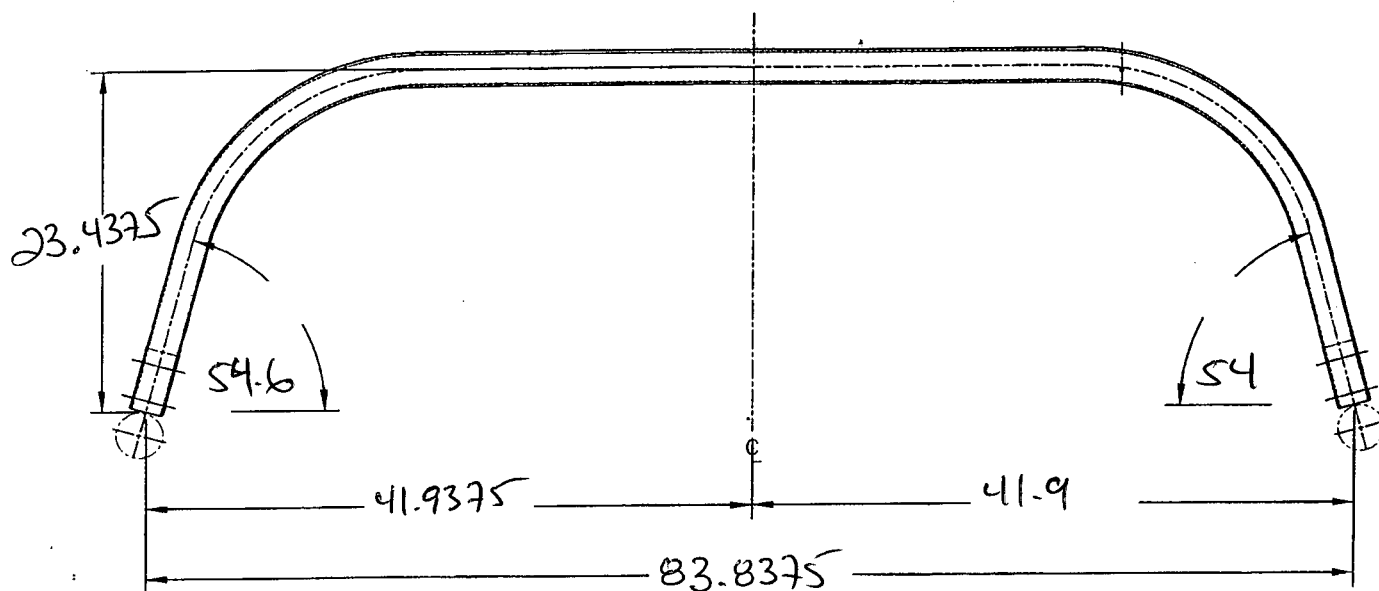
<b>Measured by:</b> JF.	<b>Audited by:</b> [Signature]	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 07/10/08	<b>Date:</b> 07/10/09	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	04.05.06	New Issue (P/O D206-667-103)	KJ/RF	
B	06.03.09	Dwg Rev updated	KJ/JLM [Signature]	[Signature]

0825

DART AEROSPACE LTD	Work Order:	34927
Description: Crosstube High Fwd (206L)	Part Number:	D206-667-103
Inspection Dwg: D206-667-143      Rev: B		Page 1 of 1

Required Dimension	Min	Max
Height	23.46	23.58
1/2 Span	41.86	41.98
Angle	54	56
Total Span	83.72	83.96



Comments
- height is even
- drill cuff holes @ <del>0.687</del> 0.700

QC15 Inspection	<i>[Signature]</i>
Date	07-10-25

Rev	Date	Change	Revised by	Approved
A	07.02.06	New Issue	KJ/JM <i>[Signature]</i>	<i>[Signature]</i>



**DART**

DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED HDS	APPROVED HDS	DRAWING NO. D206-667-143	REV. B SHEET 1 OF 3
DATE 05.07.26		TITLE CROSSTUBE ASS'Y (206L HIGH FWD)	SCALE NTS
A	00.11.17	NEW ISSUE	
B	05.07.26	ADD HOLES AND NUT PLATES FOR COMPATABILITY WITH BHT/AA SKIDTUBES	

RELEASED  
05-07-26 H**UNDER REVIEW**

05-07-10 PH

re-draw detail F  
PH

07.05.02

Qty	Part Number	Description
X	D206-667-143	CROSSTUBE ASSEMBLY (206L HIGH FWD)
1	D6002-115	CROSSTUBE
2	D2873-043	NUT PLATE
2	D2873-045	NUT PLATE
2	D2856-400-694	ABRASION STRIP
2	D2891-1	SUPPORT
14	MS20601AD4W8	RIVET (OR NAS9302B-4-8)
4	MS21920-20	CLAMP

**GENERAL NOTES:**

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 2) MATERIAL: MANUFACTURED FROM D6002-115  
FINISHED LENGTH = 104.98±0.020
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2  
PAINT OUTSIDE PER DART QSI 005 4.2
- 4) PART IS SYMMETRIC ABOUT CENTERLINE.
- 5) RUN-OFF PART. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 6) BEND PROGRESSIVELY WITH A MINIMUM OF 10 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 7) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 8) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS.
- 9) INSTALL D2856-400-694 ABRASION STRIP WITH A 0.13 (REF) GAP ON BOTTOM SIDE OF CROSSTUBE, CENTERED OPPOSITE D2891-1 SUPPORT, PER QSI 035.
- 10) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 11) IT IS OPTIONAL TO SEAL EDGES OF SUPPORTS AND ABRASION STRIP USING SIKAFLEX-241/291 SEALANT.
- 12) TORQUE CLAMPS 80 TO 100 IN-LB.

SHOP COPY  
RETURN TO  
ENGINEERING

UNCONTROLLED COPY

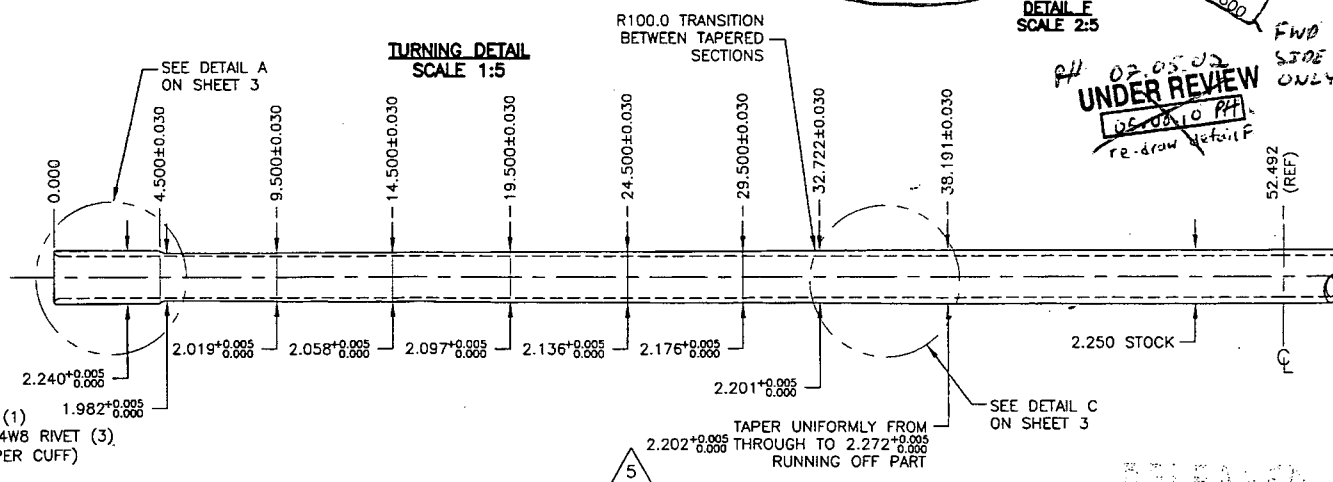
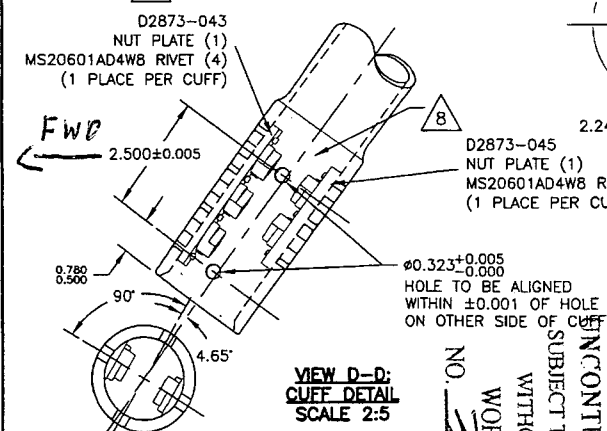
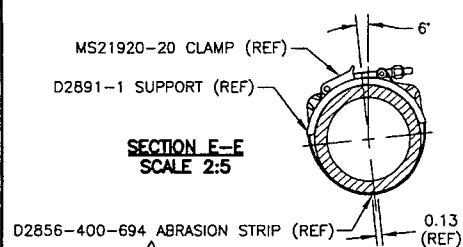
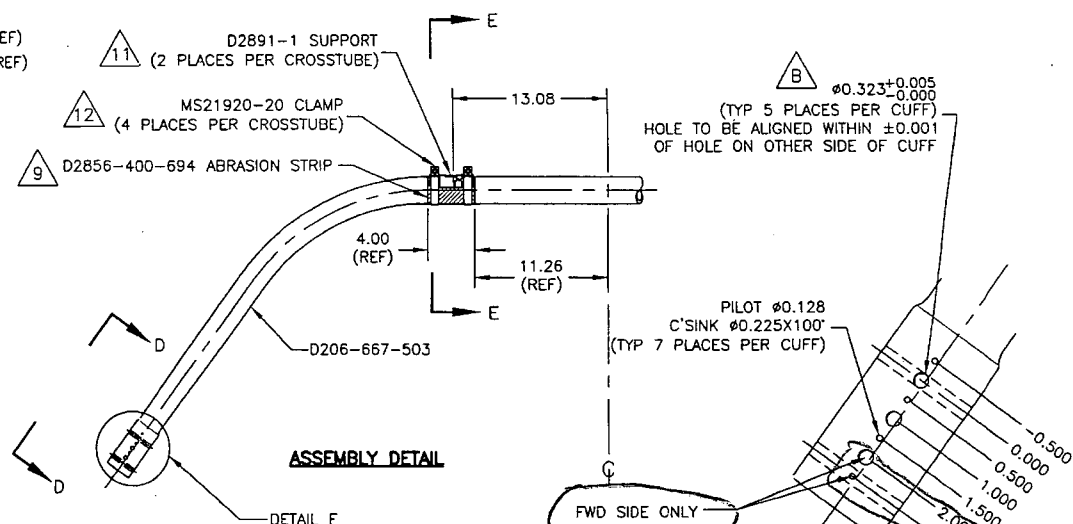
SUBJECT TO AMENDMENT  
WITHOUT NOTICE

WORK ORDER

NO. 34927

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PH 02.05.02  
UNDER REVIEW  
05.06.10 PH  
re-draw detail F

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DESIGN	PH
CHECKED	DS
DATE	05 07 26

DRAWN BY	PH
APPROVED	<i>[Signature]</i> OS

## PART

**DART AEROSPACE LTD.**  
MANULFORD, ONTARIO, CANADA

DRAWING NO.	D206-667-143
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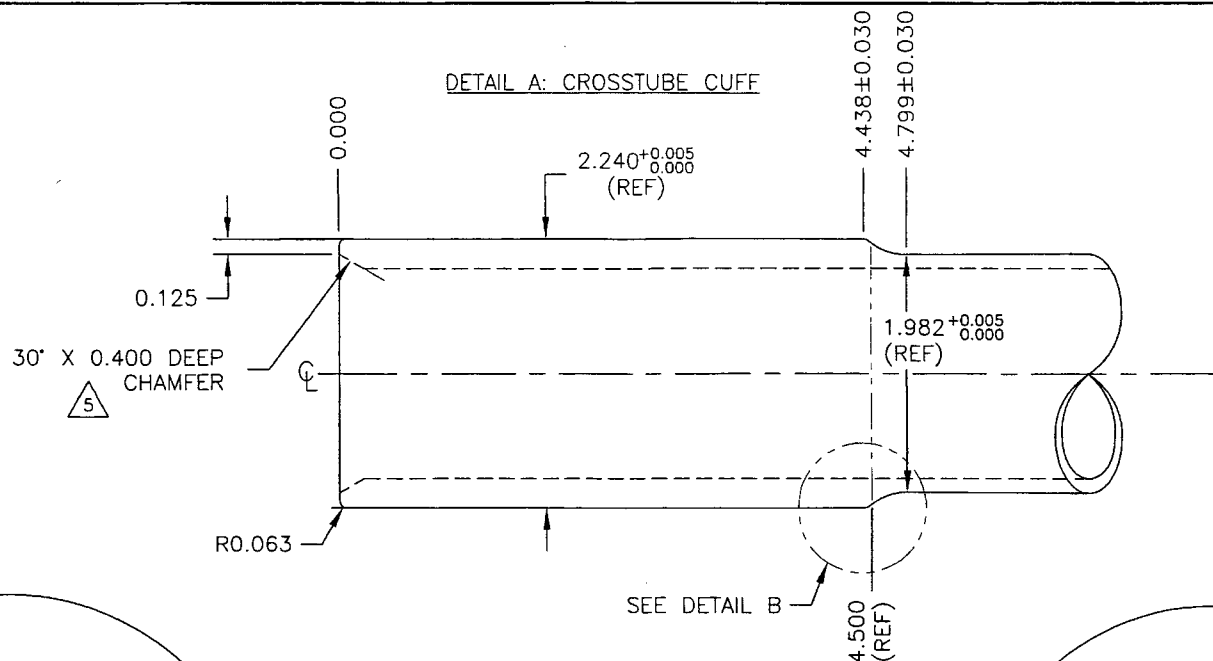
TIME	CROSSTUBE ASS'Y (206L HIGH FWD)
------	---------------------------------

REV. 8  
2 OF 3  
SCALE

**SCALE**

1:10

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SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 34927



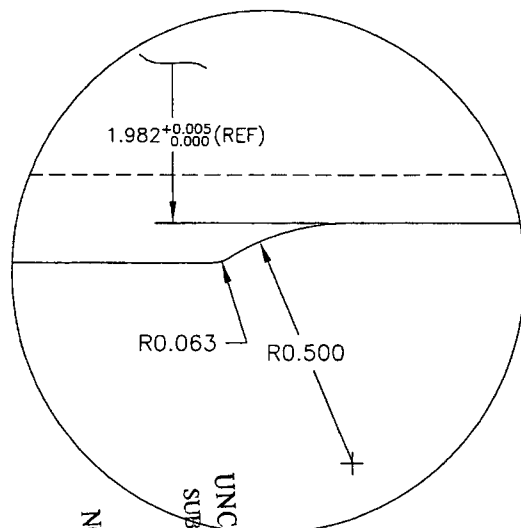
05.07.26 #1

**UNDER REVIEW**

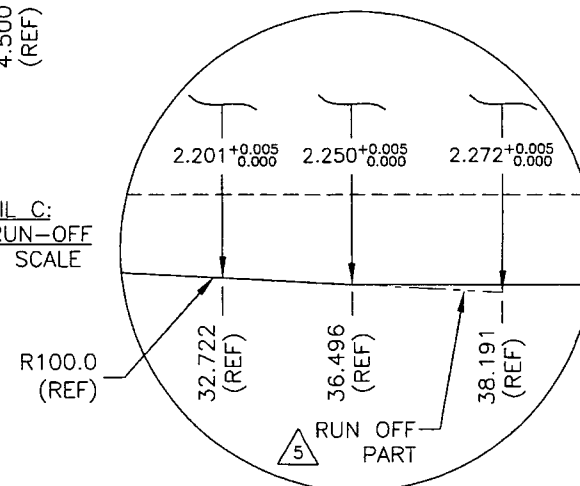
06.03.06 PH

Re-draw detail F

PH 07.05.02



DETAIL C:  
TAPER RUN-OFF  
NOT TO SCALE



NO. 34627

WORK ORDER

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THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		CHECKED	PH	APPROVED	PH	DRAWING NO.	REV. B
		DATE	05.07.26			D206-667-143	SHEET 3 OF 3
		TITLE	CROSSTUBE ASS'Y (206L HIGH FWD)				
		SCALE	1:1				



ACUREN

## LIQUID PENETRANT TEST REPORT

P- 09855

CLIENT	Dart Aerospace	DATE	Nov 2-2007	PAGE	1	OF	1
ATTENTION	Linda Lucelle	ACUREN JOB NO.	188-C7-01131	TIME	AM	<input checked="" type="checkbox"/>	PM <input type="checkbox"/>
ADDRESS	1270 Aberdeen St Hawkesbury ON	PO/NO.		WORK LOCATION	DART AEROSPACE HAWKESBURY		
PROJECT	Fluorescent L.P.I. on FWD & AFT X-TUBES	ACCEPTANCE STD.	ASIM 1417/CSIO 36	REV./DATE			
ITEM(S) EXAMINED	206L AFT X-TUBE (X4) + 206L FWD X-TUBE (X3)						
JOB#	35041+35042+35043+35044 ~ JOB# 34924+34925+34927						
JOB DESCRIPTION	PROCEDURE NO.	LT-XXXX	REV./DATE	TECHNIQUE NO.	LT-XXXX-XXX	REV./DATE	
PART NO.	AFT-D2066672039 FWD-D206667103	MATERIAL	Alclad Aluminum				
SCOPE	Liquid Penetrant Inspection - Fluorescent						

## TEST DETAILS

METHOD	<input checked="" type="checkbox"/> FLUORESCENT	<input type="checkbox"/> VISIBLE	<input checked="" type="checkbox"/> WATER WASH	<input type="checkbox"/> SOLVENT REMOVABLE	<input type="checkbox"/> POST EMULSIFIED
FAMILY BRAND	MagnaFlux		BLACK LIGHT S/N	8168	OUTPUT > 1000 $\mu$ W/cm <sup>2</sup>
PENETRANT	ZL-67	MINIMUM DWELL TIME	10-45 MIN.	LIGHTING EQUIP.	<input type="checkbox"/> FLASHLIGHT <input type="checkbox"/> TROUBLELIGHT
PENETRANT REMOVER	H2O	MINIMUM DRY TIME	> 10 MIN.	OTHER	Cal due date - Apr 17-2008
DEVELOPER		MINIMUM DWELL TIME	10 MIN.	LIGHT METER S/N	CAL DUE DATE
DEVELOPER TYPE	<input type="checkbox"/> NON AQUEOUS	<input type="checkbox"/> AQUEOUS	<input type="checkbox"/> DRY		

## TEST SURFACE

SURFACE CONDITION	<input type="checkbox"/> AS GROUND	<input type="checkbox"/> AS WELDED	<input type="checkbox"/> MACHINED	<input type="checkbox"/> SHOT BLASTED	<input type="checkbox"/> CLEAN BARE METAL
SURFACE TEMPERATURE	<input type="checkbox"/> < -4°C/ 20°F	<input type="checkbox"/> -4°C/ 20°F TO 10°C/ 50°F	<input type="checkbox"/> 10°C/ 50°F TO 52°C/ 125°F	<input type="checkbox"/> > 52°C/ 125°F	

RESULTS- (☐ METRIC ☐ IMPERIAL)

TIME	COMMENTS	ACCEPT	REJECT
	Inspection was completed on 100% External surfaces of FWD X-TUBES had several linear indications that were re-worked & removed. No further indications were found after re-inspection.		
	JOB# 35043 AFT X-TUBE had a linear indication. This part failed after re-work & re-inspection & will be re-worked & inspected @ a later date.		

**Scope of Services**  
The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Acuren Group Inc. based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.

**Standard of Care**  
In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

## SIGNATURES

CLIENT REPRESENTATIVE		DTR #	27471
TECHNICIAN (SIGNATURE):		REPORT REVIEWED BY:	
NAME (PRINT):	PAT PENAK	NAME	INITIALS
CGSB LEVEL	II	CGSB LEVEL	II
CGSB REG. NO.	3387	CGSB REG. NO.	

Date: Tuesday, 10/2/2007 10:38:26 AM  
 User: Kim Johnston

## Process Sheet

44

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 206L FWD X-TUBE
Job Number	: 34927		
Estimate Number	: 10553		
P.O. Number	:	Part Number	: D206667103
This Issue	: 10/2/2007 S.O. No. :	Drawing Number	: D206-667-143 REV B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : LANDING GEAR	Drawing Revision	: B
Previous Run	: 34926	Material	:
Written By	:	Due Date	: 10/30/2007 Qty: 1 Um: Each
Checked & Approved By	: <u>07 10 02</u>		
Comment	: Est Rev: 05.09.01 Add holes for compatibility with Bell Skid tubes KJ/JLM		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D206-667-103 CHG002

07.10.05

2.0	D6002115	Crosstube material
-----	----------	--------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D6002-115 Crosstube

Check OD = 2.250"; ID = 1.750"

3.0	MORI SEIKI	MORI SEIKI CNC LATHE LARGE
-----	------------	----------------------------



Comment: MORI SEIKI CNC LATHE LARGE

1-Fill tube with sand &amp; install plugs DT8534 on both ends as per Folio FA087

2-Turn first side as per Folio FA087

3-Deburr &amp; Inspect for surface damage. Repair damage within limits as per Dwg D206-667-143.

REFERENCE ONLY

4.0	QC1	INSPECT ALL DIM TO DIM SHEET
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Comment: INSPECT ALL DIM TO DIM SHEET